

Prepared by:  GERRY M. RUSTIA Originator	Verified by:  KAREN P. MAESTRADO ISO Facilitator	Approved by:  ENGR. MYRNA P. BOBADILLA General Manager
---	---	---

This document is a sole property of Tandu Water District. Any disclosure, unauthorized reproduction or use is strictly prohibited except with permission from Tandu Water District.

Only documents with standard stamp of Tandu Water District are considered official.

<p>Tanza Water District</p> <p>Registration Mark</p> <p>OCT 27 2016</p> <p>MASTER COPY</p>	<p>Tanza Water District</p> <p>Distribution Mark</p> <p>NOV 02 2016</p> <p>CONTROLLED COPY</p>	<p>This document is updated and controlled if it bears the red "CONTROLLED COPY" stamp. Otherwise, please refer to the Document Control Center (DCC) for your updated copy.</p>
--	--	---



Engineering Design Control Procedure

Document No. : TWD-QP-CMD-002

Revision Level : Ø

Page : Page 2 of 5

1.0 OBJECTIVE

To establish the procedure of planning and design of proposed project for conceptualization.

2.0 SCOPE

This procedure is applicable to project planning and design stage up to the approval stage of all Construction and Maintenance Division (CMD) related projects of Tanza Water District (TWD).

3.0 DEFINITION OF TERMS

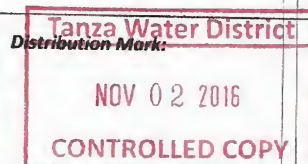
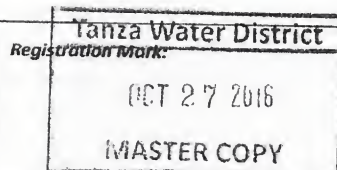
- 3.1 Planning - the stage where the proposed project is being analyzed for its feasibility.
- 3.2 Design – the stage where the appropriate size and materials to be used in the project are determined.
- 3.3 Pipeline Rehabilitation – to repair, relocate or replace pipelines due to age and frequent occurrence of leak.
- 3.4 Survey – to determine and define the road elevation, number of households and linear measurements as to the extent of pipelines and lot boundaries.
- 3.5 Program of Works – a detailed estimate on materials, equipment and labor for the proposed projects.
- 3.6 Memorandum – an internal written communication or report from one person to another within or to other divisions.
- 3.7 CMD- Construction and Maintenance Division.

4.0 REFERENCE DOCUMENTS

- 4.1 LWUA Inspector's Construction Manual
- 4.2 DPWH Standards
- 4.3 National Building Code of the Philippines 2015 Edition
- 4.4 Cost Estimates Book 2000 Edition

5.0 RESPONSIBILITY AND AUTHORITY

- 5.1 The General Manager shall be responsible for the approval of the proposed project.
- 5.2 The Division Manager shall be responsible for the final review and recommendation of proposed project.



This document is updated and controlled if it bears the red "CONTROLLED COPY" stamp. Otherwise, please refer to the Document Control Center (DCC) for your updated copy.

- 5.3 The Officer-in-Charge of Construction and Maintenance Division (CMD)shall be responsible for the review of the proposed project.
- 5.4 The Project Planning and Development Officer- B (PPDO-B)shall be responsible for the following:

5.4.1. Preparation of program of works of the proposed projects

5.4.2. Preparation of detailed drawings and plans for the proposed projects

6.0 **PROCEDURE DETAILS**

6.1 Project Planning for New Pipelines and Rehabilitation of Pipelines

Process Flow	In-charge	Process Description	Records
Start			
Instruction from the General Manager	General Manager	Shall give instruction to study and assess the veracity of the requested projects or recommendation for rehabilitation of pipeline or for infrastructure projects.	Memorandum
Site Inspection	PPDO-B/OIC-CMD/ SWMM-B	Shall conduct site inspection, elevation survey and geotechnical survey to determine the feasibility of the proposed projects. <i>Note:</i> Rehabilitation of pipelines shall be based on the historical data of number of leaks.	Site Inspection Report
Preparation of Design	PPDO -B/SWMM-B	Shall prepare design based on the gathered data during the site inspection.	Plans and Drawings
Preparation of Program of Works	PPDO-B/OIC-CMD	Shall prepare the cost estimate, plans and shop drawing for the proposed projects.	Program of Works
A			

<div>Tanza Water District</div> <div>Registration Mark:</div> <div>OCT 27 2016</div> <div>MASTER COPY</div>	<div>Tanza Water District</div> <div>Distribution Mark:</div> <div>NOV 02 2016</div> <div>CONTROLLED COPY</div>	<div>This document is updated and controlled if it bears the red "CONTROLLED COPY" stamp. Otherwise, please refer to the Document Control Center (DCC) for your updated copy.</div>
---	---	---

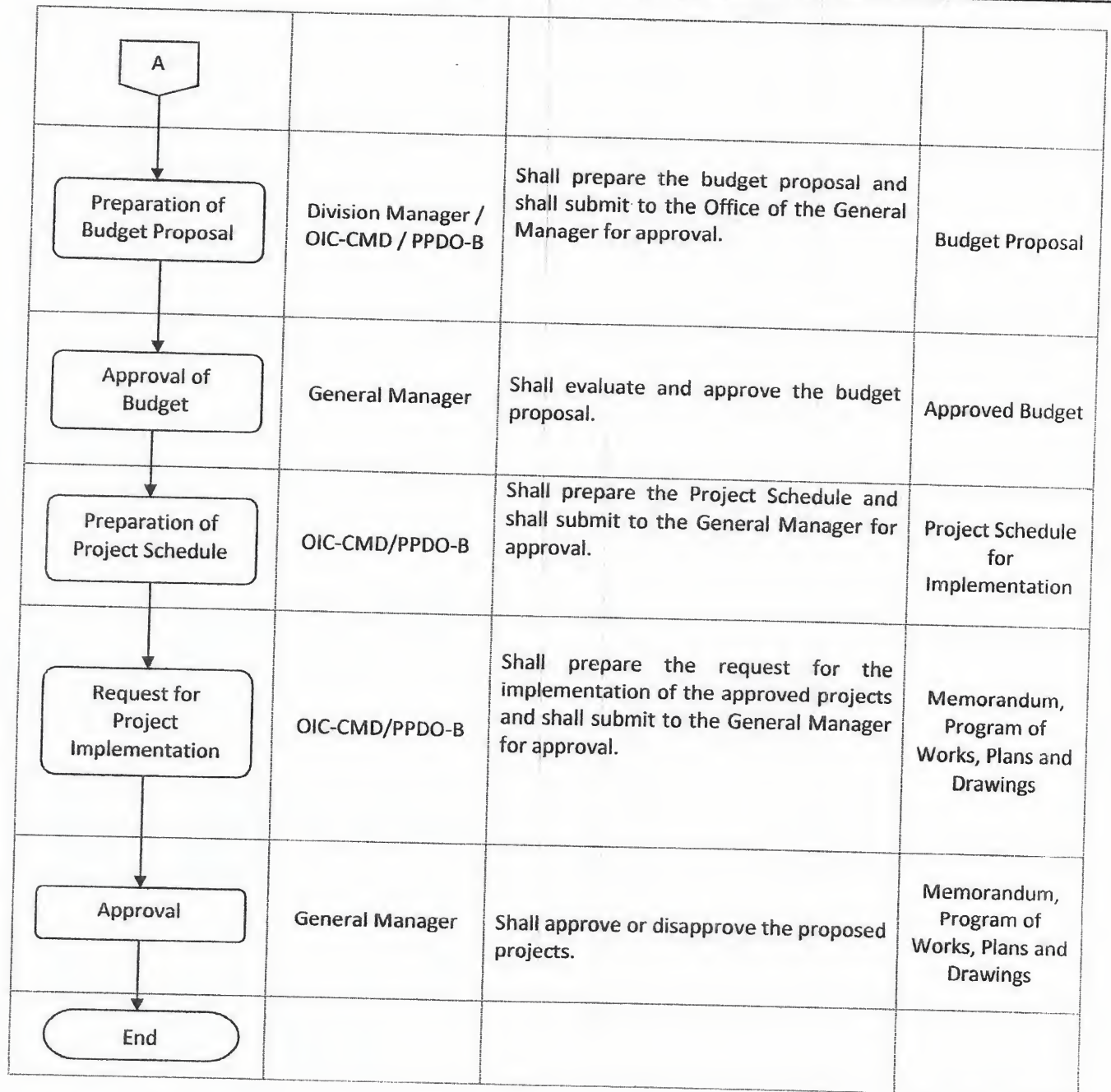


Engineering Design Control Procedure

Document No. : TWD-QP-CMD-002

Revision Level : Ø

Page : Page 4 of 5



6.2 Reports

Reports	Frequency	Responsible
Daily Monitoring Report	Every week from the start of the Project	OIC-CMD/PPDO- B

Tanza Water District Registration Mark OCT 27 2016 MASTER COPY	Tanza Water District Distribution Mark NOV 02 2016 CONTROLLED COPY	This document is updated and controlled if it bears the red "CONTROLLED COPY" stamp. Otherwise, please refer to the Document Control Center (DCC) for your updated copy.
--	--	--

7.0 PERFORMANCE INDICATORS

7.1 The prepared program of works shall be signed by the corresponding signatories and shall be approved by the General Manager for implementation.

8.0 ATTACHMENTS AND FORMS

- 8.1 Form 1- Program of Works
- 8.2 Form 2- Plans and Drawings
- 8.3 Form 3- Project Schedule for Implementation
- 8.4 Form 4- Daily Monitoring Report
- 8.5 Form 5- Site Inspection Report



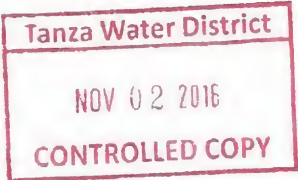
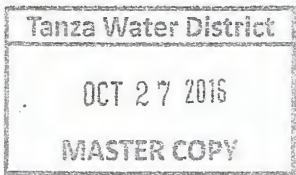
Republic of the Philippines
TANZA WATER DISTRICT
Tanza, Cavite

PROGRAM OF WORKS

PIPES AND FITTINGS	Php
PAVEMENT RESTORATION	Php
MATERIAL COST	Php
40% LABOR COST	
DIRECT COST	Php
12% VAT	
DIRECT COST	Php
5 % MISCELLANEOUS	
GRAND TOTAL	Php

Prepared & Submitted by:

Approved by:





Republic of the Philippines
TANZA WATER DISTRICT
Tanza, Cavite

Project Title:

Location:

COST ESTIMATE

[illegible][illegible]

CMD-008-00



Republic of the Philippines
TANZA WATER DISTRICT
Tanza, Cavite

Daily Monitoring Report

Name: _____

Agency: _____

DAILY WORK ACTIVITIES

DAY	DATE	DAILY ACCOMPLISHMENTS	NO. OF WORKING HOURS
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Tanza Water District
OCT 27 2016
Certified by: _____
MASTER COPY

Tanza Water District
TOTAL NO. OF HOURS
NOV 02 2016
Approved by: _____
CONTROLLED COPY

CMD-008-00



Republic of the Philippines
TANZA WATER DISTRICT
Tanza, Cavite

Daily Monitoring Report

Name: _____

Agency: _____

DAILY WORK ACTIVITIES

DAY	DATE	DAILY ACCOMPLISHMENTS	NO. OF WORKING HOURS
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Certified by: _____	TOTAL NO. OF HOURS _____	Approved by: _____
---------------------	--------------------------	--------------------



Republic of the Philippines
TANZA WATER DISTRICT
Tanza, Cavite

[illegible]

LOCATION:

Prepared by:	Amza Water District
Reviewed by:	
Approved by:	OCT 27 2016
	MASTER COPY

Tanza Water District
NOV 02 2016
CONFIRMED IN COPY

Signature	Date



Project: **Tanza Water District**

OCT 27 2016

MASTER COPY

Location:

Tanza Water District

NOV 02 2016

CONTROLLED COPY

Checked by:

Approved by:

Sheet No.:



Project Monitoring Report
As on: _____

Project Title: _____
Location: _____

[illegible]

Tanza Water District		Tanza Water District	
Prepared by:	2016	NOV 02 2016	
Checked by:			
Approved by:	MASTER COPY	Tanza Water District	
		CONTROLLED COPY	
	Printed Name	Signature	Date